

The semiotics of intercultural exchange: Ostensive definition and digital reason

HORST RUTHROF

Abstract

The paper distinguishes two forms of intercultural exchange, negotiation between cultures at a personal level and global exchange. In the first case, Ostensive Definition appears to be crucial. The paper attempts an inter-semiotic rehabilitation of OD in response to Wittgenstein and Quine. In global intercultural exchange the 'universal grammar' of digital reason appears to be the crucial component to be analysed. Both forms of negotiation, the paper argues, rely on Vorstellung as an essential ingredient. Yet Vorstellung is missing from the traditional theorisation of both OD and the digital bitstream. The paper concludes with a ubiquity thesis of Vorstellung.

1. Introduction

Understanding a culture means entering its iconicity not only in its semiotic manifestations but also in the way a culture typifies its perceptuality. Both the analytic tradition and post-Saussurean structuralism up to its postmodern extensions have found it hard to reconcile our languages with our perceptual being in the world. From a post-Peircean standpoint this amounts to saying that our dominant discourses about language have failed to account for iconicity in the broad sense.

Consider the following example: Four semioticians are sitting on a beach near Marseilles, in turn pointing at their big toes and saying 'wode da muzi,' 'mon gros orteil,' 'meine grosse Zehe,' 'my big toe.' From this initial attempt at intersemiotic ostensive definition the four progress rapidly towards more and more involved intercultural negotiations unperturbed by Wittgenstein's and Quine's objections.

In this paper I want to explore four theses which I believe are relevant to the semiotics of interculturality and globalization:

1. Ostensive definition is *essential* to intercultural understanding, but is in need of intersemiotic rehabilitation;
2. Electronic binary-digital reason appears to function as a *universal deep grammar* facilitating interculturality on a global scale;
3. Yet there seems to be something missing in digital reason;
4. We require a '*corporeal turn*' in linguistics to give a satisfactory description of how interculturality works, with an emphasis on culturally guided *Vorstellung* as a crucial ingredient of the linguistic sign.

2. Ostensive definition rehabilitated

Let me begin with a few quotations on ostensive definition from Wittgenstein's later writings. Wittgenstein distinguishes between ostensive definition and 'ostensive teaching of words' as 'an important part' of our language 'training' as children (*PI*: 6). But he rightly asks, 'Are "there" and "this" also taught ostensively?' (*PI*: 9).

For Wittgenstein 'ostensive definition, is ... a language-game on its own' (*PI*: 27). But how in this language game 'can the number two be defined?' (*PI*: 28). For 'an ostensive definition can be variously interpreted in *every* case' (*PI*: 28). And 'how someone "takes" the definition is seen in the use that he makes of the word defined' (*PI*: 29). That means that 'the ostensive definition explains the use — the meaning — of the word when the overall role of the word in language is clear' (*PI*: 30). I would suggest here that the potential relation of the words of the phrase 'this is my big toe' to other words in English is clear only to the extent that the ostensive definition permitted on the beach.

Wittgenstein presses the point further by asking 'could one define the word "red" by pointing to something that was *not red*?' (*PI*: 30n). And he adds 'any definition can be misunderstood' (*PI*: 30n). As to intercultural constructions, Wittgenstein notes, 'someone coming into a strange country will sometimes learn the language of the inhabitants from ostensive definitions that they give him; and he will often have to *guess* the meaning of these definitions; and will guess sometimes right, sometimes wrong' (*PI*: 32).

As semioticians, we would wish to extend his frame of inquiry seriously at this point: the longer this person lives in that country, i.e., the more ostensive definitions he is given, the more often he will be right, rather than wrong, until he uses the new language like a native speaker. Furthermore, it is not possible *never* to be given ostensive definitions, because the

visitor will construe them himself by conjecture when he or she observes linguistic use in relation to nonverbal acts.

In *The Blue Book* Wittgenstein briefly compares verbal and ostensive definitions. 'The verbal definition, as it takes us from one verbal expression to another, in a sense gets us no further. In the ostensive definition however,' Wittgenstein concedes, 'we seem to make a much more real step towards learning the meaning. One difficulty which strikes us is that for many words in our language there do not seem to be ostensive definitions; e.g., for such words as "one", "number", "not", etc.' (Wittgenstein 1972: 1) This, I suggest, is not correct, for semiotic reasons summed a little later.

Because 'ostensive definition allows many interpretations (pencil, round, wood, one, hard, etc.)' and because 'if we had to name anything which is the life of the sign, we should have to say that it was its *use*' (Wittgenstein 1972: 2, 4). Unfortunately here Wittgenstein retreats to his intersyntactic conception of 'use.' 'The sign (the sentence) gets its significance from the *system* of signs, from the language to which it belongs. Roughly: understanding a sentence means understanding a language.' (Wittgenstein 1972: 5) At the same time he rejects iconicity as playing a part in 'thinking.' 'Thinking is essentially the activity of operating with signs [by which he means linguistic signs, for] . . . if we think by imagining signs or pictures, I can give you no agent that thinks' (Wittgenstein 1972: 6). This position, I believe, is in need of 'iconic' rebuttal.

Nor is it quite right to say that 'a word has the meaning someone has given to it' (Wittgenstein 1972: 28). What we should say is 'whenever we use a word we *endow* it with a meaning that we think is *appropriate* according to standard *use* or that we think allows us to deviate from standard use.' Certainly, for Wittgenstein 'it is not the purpose of the words to evoke images (It may, of course, be discovered that that helps to attain the actual purpose)' (*PI*: 6). I will suggest that Wittgenstein's 'can-rule' is actually a 'must-rule.' Because he has restricted his analysis to visual semiosis, he is unaware that iconicity is a broad field, including olfactory, gustatory, tactile, and other nonverbal forms of semiosis.

A counter argument could run like this: We now know that we can distinguish thousands of olfactory nuances while we have only a handful of verbal equivalents in our natural languages. This suggests that when we imagine, e.g., remember a specific smell interpretation, an iconic sign cluster, it is very likely that we are not in a position to find the *right* word, because there is none, but opt for the word or phrase that seems to us to get as close as we can to expressing our *Vorstellung*. From this angle the critique of ostensive definition appears flawed in the following ways:

1. Wittgenstein, it seems to me, has chosen too narrow a frame for his analysis. We are in a very different position if we replace singular occurrences by a number of appropriate series: one series in which the object remains constant but the number varies; one series, in which the number stays the same and the objects change; a series in which the verbal deixis 'this' and the corporeal deixis (pointing) remain constant while the objects vary; a series in which the colour remains the same while the objects vary; a series in which the shape remains the same but weight, roughness of surface, degree of transparency, etc. vary, a proven Husserlian exercise. Even in the simple thought experiment of our semioticians on the beach, such 'intersemiotic games' literally *incorporate* Wittgenstein's 'language-games,' a possibility he himself sometimes allows for ('Speaking is a part of a form of life' [PI: 23]), but fails to prioritise.
2. Even in his later work (*Philosophical Investigations*, *Zettel*, the *Blue and Brown Books*), Wittgenstein had not fully shaken off his Fregean inheritance and remnants of calculus thinking. Wittgenstein is aware of both these constraints. At one point he says that when we 'constantly compare language with a calculus' we are engaging in 'a very one-sided way of looking at language' (Wittgenstein 1972: 25). And in *Zettel*, he concedes 'The style of my sentences is extraordinarily strongly influenced by Frege' (author's translation, Wittgenstein 1967: 712). This bias shows in a number of assumptions, such as the propositional nature of thinking (Frege's 'pure thought' as the *Sinn* of a sentence); the elimination of *Vorstellung* (Frege's rejection of *Vorstellung* as subjective); and the singularity of evidence (Frege's singular example of Venus as morning and evening star to argue '*Sinn und Bedeutung*').
3. Wittgenstein failed to take his iconic notion of 'form of life' as the radical new basis for his *Philosophical Investigations* and align his definition of meaning as 'use' accordingly. I suggest that had Wittgenstein freed himself more forcefully from calculus thinking (even his 'use' is backed up the analogy of playing chess, a purely syntactic or matrix mathematical operation) and instead taken his insight of 'form of life' more rigorously as his new basis of inquiry, he would have felt forced to opt for a larger frame: the intersemiotic frame of cultural and intercultural practice. The fact that Wittgenstein once refers to 'form of life' as 'the given' strengthens my suspicion that had he lived longer he might very well have revised both 'use' and 'form of life.'
4. From this perspective we can redefine Wittgenstein's meaning as 'use' as 'the activation of linguistic signifiers by nonverbal signs according to social instructions.'

5. Likewise, 'form of life' can be redefined as 'culture specific clusters of nonverbal signs constituting the semantic deep structure of linguistic signs.'
6. A similar critique applies to Quine's untranslatability thesis. When a native on the hunt points to a rabbit and shouts '*Gavagai*,' the observing linguist assumes that the native means 'rabbit.' Quine shows convincingly that 'this translation is insufficient to fix the reference of "*gavagai*" as a term,' an example of the 'indeterminacy of reference,' earlier called 'inscrutability of reference' and 'ontological relativity.' (Quine 1993: 53) For the native could have an entirely different ontology and so could have meant 'rabbit time slice' or 'it is spring.'

As in Wittgenstein, Quine's isolated example entirely distorts what is going on in intercultural encounters. What is missing in this single event focus and calculus approach is the dimension of time and hence any possibility of evolution. Even the most disparate cultural ontologies will yield, sooner or later, a common platform from which translation will be able to arise. As it turns out, an essential feature of this platform is our shared physiognomy. After all, Quine's native is not from a distant planet, a Star Trek shape shifter, but one of us. At a certain level, all culture grows out of the ontic and epistemic facts of our biological bodies. We all drink, eat, are born, and die, even if cultures place these activities into different value pyramids. It is this *biosemiotic* baseline that enables us to avoid the pitfalls of Wittgenstein's and Quine's problematic and gradually, by trial and error, climb the ladder of interculturality.

Not surprisingly, when Quine's invokes mental states such as thought experiments, such as an imagined linguist relying on his 'translation manual,' he proves himself ill equipped. What is lacking is a fully semiotized scenario of which the linguist is a part. Only when we broaden Quine's perspective can we account for intercultural translation as a negotiatory approximation. What Quine needs is an argument for the activation of *multiple* sign systems in interaction. When we look at the '*gavagai*' example from such a broadened, and hence more realistic, angle we notice a crucial difference: we have what we could call 'intersemiotic triangulation' (a kind of semiotic 'cocked hat') as a minimal measure or 'intersemiotic polyangulation,' an intersemiotic form of 'overdetermination.' In cultural practice, in time the uptake of '*gavagai*' will become as reliable an approximation to the other culture as is possible.

Yet such is the atomistic approach to language that it must preclude cultural semiosis. And even the Wittgenstein of the *Philosophical Investigations*, hailed as the great breakthrough to 'ordinary language' philosophy, fails the Kantian test of teleological projection, the dialectic between

large scale heuristic stipulation of an interpretive frame, e.g., nature or a culture, and the details we observe about it. For without casting a wide speculative interpretive net, intercultural negotiation is doomed.

7. The elimination of *Vorstellung* from language semiosis is illegitimate for the following reasons: Fregean verbal descriptions are no guarantee for objectivity. We do not carry dictionaries in our heads that we rattle off when we think of a term such as 'democracy' or 'oppression'; and when we test the 'definitional' grasp of students in the class room we will find that the descriptions vary quite drastically amongst individuals.

At the same time, *Vorstellung* is by far not as subjective as Frege thought. Every culture teaches its members to conceive of the world and even their fantasy worlds in typical rather than random ways. The Stasi in the GDR knew this better than Frege when they asked children in kindergarten to draw the images of TV clocks. Oval clocks assured them of loyal citizens; round clocks revealed parents who watched West German news. So much for the alleged subjectivity of *Vorstellung*.

8. I wish to place special emphasis on the necessity of *interpretive holism* in matters intercultural. In a semiotic review of Kant's *Critiques*, which would read them in reverse, beginning with the most complex form of reasoning, reflective and teleological reason and then proceeding to the different forms of reason of ethics, induction and deduction, the *Critique of Judgment* would be the one to look at for methodological guidance. For the revolutionary moment in the *Third Critique* is the creative leap of stipulating a *heuristic frame* which stands in a dynamic interpretive relation with the details we wish to test under its stipulated umbrella (A digital parallel is the mouse of our PC which allows us to pinpoint specifics only after we have settled on a new frame of vision). Intercultural interpretation is the example *par excellence* of the necessity to project a *non-given* whole within which particulars can be interpreted to make sense.

While in the other *Critiques* at least one side of the judgment equation is secured, in the *Critique of Judgment* Kant introduces a discursive formation in which neither subject term nor predicate is given. Whereas in deductive (pure) reason both subject and predicate are resolved by recourse to definition, in inductive (synthetic a priori or applied deductive) procedure a given formal rule is applied to empirical facts, and in practical reason a stipulated moral rule is applied to the interpreted fact of social acts, reflective reason invents both its rule and the frame within which the judgment is to be regarded as valid, that is, attuned to community

expectations or *sensus communis*. (CJ: 156–160) Instead of slotting specific observations into a pre-given scheme, the reflective judgment invents a general law suitable to the interpretation of specifics. This reversal was what inspired Charles Sanders Peirce to speak of *abduction*, (CP 5.189; cf. also CP 5.145; 5.171; 5.480; 6.497) a variant of Kant's rule '*die reflektierende Urteilskraft soll unter ein Gesetz subsumieren, welches noch nicht gegeben*' [reflective judgment is to subsume under a law that is not yet given] (author's translation, CJ: 312). In other words, we must invent the rules of interpretation as we go along. I note in passing for the benefit of those amongst my colleagues who have so vigorously disputed Peirce's debt to Kant, that Peirce explicitly refers to Kant in a late entry to the effect that phenomena 'present that mixture of freedom and constraint, which allows them to be, nay, makes them to be teleological, or purposive.' (CP 7.570) But, as Kant insists, it is us who decide which interpretive frame is the most appropriate in light of what is given and against the horizon of a community-sanctioned paradigm.

Intercultural negotiation is a prime candidate for this kind of procedure. Since no frame of interpretation is pre-given, we have to invent a *purposiveness*, and to proceed as if we knew the systemic coherence of the other culture as a whole. There are two important insights here: one is that the judgment of any phenomenon needs to be embedded in a large configuration (*heuristic coherence* of necessity); the other is that of creativity. We cannot simply read the reflective *telos* off the complexities; we impose it as a 'spin' on the data. Here we have passed from the critical to the speculative-critical Kant and to the revolutionary moment of the *Third Critique*: there is *no limit to the kind of framing conditions we wish to project for our interpretations*, as long as they allow for the phenomena we think constitute the whole. Each interpretive frame is merely *heuristic*; it is invented in order to allow us to proceed with our forever provisional reading. This applies to both judgment of nature and works of art, except that in art we do not foreground practical application. We can now abstract from Kant's two main examples, art and nature, to the level of large scale phenomena in general, such as culture. At this level what remains of the principles of interpretation in art and nature is the *heuristic* form ('*ein heuristisches Prinzip*') of the reflective judgment. (CJ: 355)

Here Kant employs a dynamically stipulated *telos* for 'reflective reason' which does not make any definitive claims but rather functions as a 'regulative principle of cognition,' permitting the imposition of order on what would otherwise remain for us chaotic (CJ: 312). Since we are missing 'the key' to such large scale phenomena as nature or culture, the relations so ordered are 'regulative' relations relative to an interpretive scheme (CJ: 387). Reflective reasoning under its projected *telos* can be no more than a

'*Leitfaden*,' says Kant, a guiding thread (*CJ*: 301) for the invention of 'a *kind* of causality' (*CJ*: 309) in order to make complex phenomena '*erklaerbar*' [explainable] or, more precisely, '*erkennbar*' [cognizable] (author's translation, *CJ*: 307). This is not an 'objective claim,' for if we were to apply determining reason to such large scale systems as nature, we would be guilty of a 'dogmatic' use of concepts (*CJ*: 329). Reflective reason is needed when we wish to speculate on coherence in the absence of adequate experience (*CJ*: 332). Since we in no position to observe a culture's purposes as 'intentional' or as a closed system and so cannot proceed deductively, we speculate on its *possible* coherence. Kant insists that 'the one manner of explanation [reflective] excludes the other [determining].' This is why in the interpretation of complex systems we should replace 'explanation,' which is determining, by 'exposition,' its critical-speculative alternative. (*CJ*: 356f.).

Since in reflective reasoning both the subject side of the statement and its predicate are unstable, there is no ground for speculative-critical judgments 'inside' the equation; its ground lies outside the discursive formations employed and indeed outside the subject performing the act of judging. It lies in the social, the *sensus communis*, the interpretive community (*CJ*: 156ff.) This makes sense only if we remember Kant's distinction between two kinds of subjectivity, the *merely* subjective realm of likes and dislikes, and what he calls 'subjective universality,' better translated today as *intersubjectivity*. Subjective universality incorporates community expectations, as Kant illustrates when he speaks of the 'expanded horizon,' a judgment that anticipates and responds to the possible objections of our fellow citizens. (*CJ*: 158; Ruthrof 2004)

Preliminary conclusion: *Vorstellung*, then appears to operate at two distinct levels, at the micro level of the linguistic signified in the sense that *Vorstellung* provides us with intersemiotic, iconic signs from which we select appropriate clusters for the semantic activation of our empty, arbitrary signifiers; and at the macro level by allowing us to project generous interpretive frames that grant 'heuristic coherence' to our assumptions of the other culture. Without these two fundamental ingredients interculturality, I think, cannot come into existence.

3. Global interculturality and the digital bit stream

3.1. Digital encrypting

It is ironic (is it not?) that it was engineers and not philosophers who have provided us with a *universal deep grammar* for all cultures: the electronic

realisation of Boolean logic. Not Kant's paper on universal peace, but computer nerds have ushered in the possibility of global interculturality. When in 1952 US scientists developed semi-conductors they opened the way to the revival of a dormant form of mathematics, Boole's nineteenth century binary digital code, to be harnessed in ever more compact electronic circuitry. Lyotard (1984) rightly points to the 1950s as the dawn of a new techno-logos, heralding the postmodern era. In spite of the long-sustained debate whether we are actually dealing with a recognizable new epoch or whether we are still in the 'incomplete project' of modernity (Habermas 1971, 1974), there is no doubt that a radical semiotic shift has occurred, a shift from the industrial machine age to the age of *machine-monitoring* by electronic circuitry. No doubt the 'incomplete project' argument has political philosophical force, but it fails to account for the radical change of global interaction from a relatively slow process of industrial internationalisation to the sudden, high-speed transformation of economies and cultures on a global scale.

While the Newtonian conceptions that linger on in traditional machinery could be bypassed by individuals as by entire cultures or absorbed at a rate they thought compatible with their self-interpretations, no such choice is afforded by the digital bit stream. It is ubiquitous and unavoidable. The most remote Chinese village is beginning to embrace laptop, mobile phone and TV channels addressing hundreds of millions of viewers in today's China. But it is not the electronic machinery as much as their shared deep semiotic processes that produces the global results. No matter what language, political system, and cultural value preferences, they are all equally and rapidly expressed by the semantically indifferent bit stream of 1s and 0s channelled through the logic gates of electronic circuitry. The fundamentalist terrorist's message to blow up a target is received by intelligence services in the very same manner it was sent: through the orifices and the AND, NAND, OR, NOR and flip-flop gates of electronic devices. The high-speed bit stream assumes the role of a special semiotic: a new, though hidden, universal grammar.

3.2. *Cultural effects of the digital*

When Jürgen Habermas wrote 'Science and technology as ideology' he was doing more than just offering Ludwig Marcuse a special seventieth birthday present. He achieved what was then a major breakthrough in the debate about the possibility of a more 'human' technology, as Marcuse had thought possible. Habermas's paper knocked that idea on the head for good. By way of an elaborate distinction between 'symbolic

interaction' and 'purposive rational action,' Habermas was able to show that human social rationality and machine rationality have fundamentally opposing ideologies, the former optimizing 'emancipation,' the latter ruled by the ideology of 'maximizing output and control.' And in the absence of any effective political will in the 'public sphere' technocracies would replace what is left of democratic societies, in which case human symbolic interaction will become obsolete and replaced by 'purposive rationality' (Habermas 1971, 1974).

In the digital age, a similar critique is needed, investigating the semiotic base of electronic machinery. While there is by now a vast literature from Baudrillard to Virilio (1995, 1986), from Jameson to Poster (2002), elaborating digital being and its social configurations, little attention is being paid to the minutiae of the cultural effects of the semiotic deep structure of the Boolean code. What interests us here in particular is the relation between cultures and how they are likely to be affected by the new 'universal grammar.' Even though the bit stream is deeply buried in the body of the digital machines and looks indifferent to the values and judgments its transports at electronic speed, it does have semantic effects which exactly mirror what goes on in the logic gates. Light speed bits in combinations of 0's and 1's, packaged in bytes of eight produce indirect semantic effects of: seriality, replaceability, speed, indistinction, indifference, forgetting, dissolution of subjects, availability, shelvability, masking mediation, repeatability, either/or as well as 'and' syntax, the chain reaction of the textual, data flow, fusion of the actual and the fictive, fragmentation, de-historicisation, random access, dissolution of reference, dissolution of deixis, rapid creation, rapid satisfaction of desire, packaging, and high-speed delivery, exchangeability. These syntactic features of the bit stream produce at the same time a new social style, a new cultural semiosis, as well as a 'digital politics' and so a new 'body politic' (Savat 2003: 184–197). Such semantic effects produce, I think, the cultural ideology of the digital.

3.3. *Cultural imperialism*

Given this intrusive force of digital semiosis, it is not surprising that there has emerged a substantial literature addressing the question of 'cultural imperialism' since the transfer of both digital machinery and its semiotic-semantic effects typically occurs as a transformation of technologically less advanced cultures by advanced capitalist cultures, the US, Europe, and Japan. Amongst the myriad of digital machinery, it is media imperialism that tends to be singled out in the critical literature (McCargo 2003; Curran and Park 2000; Thussu 1998).

Cutting across such investigations, we note three distinct levels at which cultural imperialism, as well as other forms of interculturality, appear to be effective: at the level of *media content*; the level of *media discourse*; and the level of the *digital bit stream*.

1. In intercultural global exchanges, *media content* tends to be blunt, sometimes brutal, and effective in cultures unable to maintain control over local content. In China, for example, this is not the case. Stations such as the CCTV or CETV, broadcasting from Beijing at times to over 900 million viewers, as well as provincial stations, very much determine their own programming, with an overwhelming emphasis on local Chinese traditional and contemporary content. And even the Hong Kong based Phoenix station, owned by Rupert Murdoch, on the whole offers Chinese programmes to its viewers in Hong Kong as well as across the border into China. So where a culture is self-assured and powerfully managed by its political regime, cultural imperialism by media content is largely ineffective.
2. It is a different story at the level of *media discourse*. Here the global influence is much more insidious, effective, and much more difficult to control. Slick programming styles, non-indigenous TV genres, such as talk shows and shows with audience participation through electronic feedback are beginning to have a noticeable effect even on the most stubbornly proud cultures, such as China. From this perspective, Rupert Murdoch's Phoenix station plays a powerful role in the dissemination of new TV styles and the transformation of Chinese culture. It is impossible for even the monopoly mainland stations such the CCTV to remain unaffected by shifts in media discourse knocking at the door from Hong Kong. The horizon of *presentational* expectations amongst millions of Chinese viewers is gradually and inevitable tuned to the seductive Phoenix styles.
3. By far the most drastic global transformation of all cultures however, including China's, is effected *indirectly*, I suggest, by the unstoppable penetration of the bit stream itself. Its peculiar semiotic, as sketched above, is beginning to reshape human behaviour in profound and already observable ways. In China, an entire generation of young people are feared to unlearn the proper writing of Chinese characters because it is so much easier to type the pinyin representation of the spoken form into the laptop or the SMS of the mobile phone, leaving the instant and seemingly effortless encryption into *Hanzi* to the machine. Furthermore, the user friendly bit stream obliges by offering a number of instant alternative phrases, relieving users of the task of constructing their own well thought through message. This situation

is aggravated by the machinic anticipation of entire clauses, which seriously undermines the mastery of Chinese syntax, especially the traditional penchant for the four term phrase, which functions as idiomatic expression, linking present day Chinese with traditional poetry. Should we not also call this a form of intercultural imperialism? Perhaps. One thing seems certain. In terms of speed and accuracy of communication, the stylish metaphoricity of Chinese writing is no match for the Boolean simplification of discourse, a semiotic that has its roots in the celebration of instrumental reason and technologos of the European Enlightenment.

3.4. *Culture as pyramid*

If this is so, how is culture affected by the bit stream in principle? Let me simplify matters by proposing a schema with two limiting cases and a spectrum of different cultural pyramids in between, in order to present a possible scenario of the digital effects of global interculturality.

The two limiting cases, mere thought experiments of course, illustrate the task of the two axes. The vertical axis indicates the degree of cultural values and their top-down organization. One could also refer to this axis as the axis of *semantics*. The horizontal axis indicates *syntax*, or ordered progression in time, with the baseline representing the syntax of the digital bit stream. Where the cultural or semantic axis quantifies the 'value differentiation' or 'committed differentiation' of a culture in relation to its apex and baseline, the base line represent 'mere' or '*indifferent difference*.' Fundamentalist belief systems could be allocated at the left side of the chart, with increasingly value indifferent cultures towards the right side of the chart. The limiting case of an ahistorical cultural pyramid in which everything is entirely controlled top-down by its apex or a '*summum bonum*' could be contrasted with its imaginable other, a culture that has totally exhausted its value system, transformed into a flat-line culture indistinguishable from its indifferent base of mere differentiation.

3.5. *Culture kills*

We tend to celebrate cultures as human achievements. Rarely do we take a hard look at our own culture in terms of its brutality and the damage it has done to others. If we believe certain statistics, more than 250 million

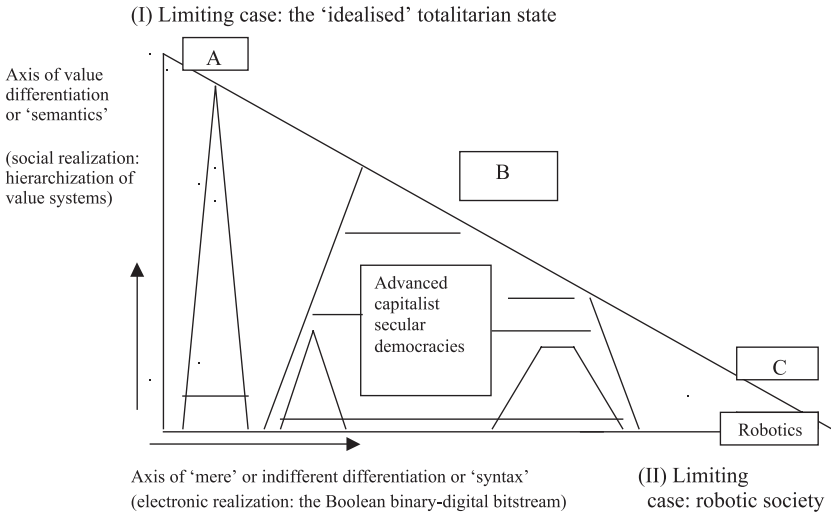


Figure 1. Culture Chart

A — the steep cultural pyramid of tightly controlled societies with a summum bonum as apex. They are characterised by the subordination of reason to the apex of the value pyramid and strict hierarchization of social norms. Examples are the medieval Christian Church, various forms of Fascism, Stalinism, Maoism or Islamism.

B — the flattened pyramid of secular, advanced capitalist societies. Characterised by the absence of tight control from the apex. Instead there is value competition at all levels and the diversification of reason (multiplicity of institutions, generation of ever new forms of reasoning and their concomitant political, legal, commercial, and technological manifestations). At this historical moment this type of pyramid also displays specifically the rapid expansion of digital, instrumental reason.

C — robotics is the moment where social value hierarchisation is flattened out entirely into the base syntax of the Boolean binary-digital bitstream. Reason is one-dimensional, mere binary sequence, and all there is.

This arrangement suggests two idealized, limiting cases, between which social actuality occurs: (I) the limiting case of the absolute, totalitarian state, where all values are subsumed under monolithic control and (II) the limiting case of total syntactic control, the robotic society, where all value is neutralized in the syntax of the system.

people have been slaughtered in the name of Christ. In this sense, we can say that 'Culture Kills.' The higher and steeper the pyramid, the more exclusively dominated its social relations, the more likely that it is murderous. German fascism was such a pyramid, unique because of its monstrosity and the brief time it took to construct. If the Spanish monks had not burned over 200 books recording several hundred years or more of Mayan history, beliefs and art, we would find it a lot easier today to translate the Mayan language.

3.6. *Re-ligion and pro-ligion*

Another aspect of culture and interculturality one may wish to draw from our simple chart is the idea that Christianity is probably no longer a religion but a pro-ligion. In a tight religious pyramid, such as the Catholicism of the Middle Ages, with the Inquisition guarding its spiritual borders, believers were back-bound, or *re-ligati*, to an authority whose stability and permanence was guaranteed, at least sometimes, by a powerful papal hierarchy. Similarly, certain fundamentalist conceptions of Islam today. Perhaps the only truly religious person is someone prepared to kill himself (and a few others) to protect the greater glory of the apex of the pyramid. By contrast, Christianity has turned pragmatic, re-defining its God forward to guarantee his approval of the Bank of the Vatican: a pro-ligion. The other not so scholarly suspicion I draw from the chart is that the present suicidal religiosity is directed against the US military and its commerce only at the surface, while deep down it is a desperate expression of the realization that instrumental reason in its digital form has already declared any serious religiosity an historically redundant and misguided fantasy. And where better to strike than at the frontier of digital research?

3.7. *The paradox of digital interculturality*

Much as the cultural pyramid can be replicated and coded in the digital bit stream and reconstituted in its full semiotic richness by members of the culture for a while, over time its very digitization will gradually undermine and ultimately deny its existence. For it is the culture's *Vorstellungswelt* that has sustained its observable cultural practice. The new *Vorstellungswelt* characterized by digital practices is by definition at odds with the traditional ways in which perception and fantasy contributed to the life of the culture. But cultures always change, we may object. Indeed, they do, and change is part of the very notion of culture. Yet there is a new difference, different from all previous differences. The pyramid is no longer merely shape shifting; rather, it is relentlessly drawn towards its semantic, though not semiotic, death. We are dealing here with a new form of semiosis, a semiosis without semantics. (Chesher 1997: 86) As Baudrillard has told us, in the digital world meaning is fatal (Baudrillard 1990).

4. The corporeal turn

No semantics, no meaning, no iconicity, no *Vorstellung*. Is this a plausible scenario? And is this a likely basis for the description of natural language?

When Frege banned *Vorstellung* from the description of *Sinn* on the grounds that it introduced a subjective component, the semiotics of calculus took possession of natural language semantics. A further step in the same direction occurred with the post-Saussurean reduction of language to signifiers in differential relations, or syntax. As Todorov once pressed the point, 'a word's meaning is the sum of its possible relations with other words' (1977: 24). So put, language is indeed no more than chess. But to say that French is like chess is nonsense. French is indeed like chess at the level of syntax. However, without paying serious attention to its semantic-pragmatic dimension, the linguist produces a false picture. It would seem then that our theories of language have been too eager to remain in touch with the semiotics of formal propositions at the expense of the theorization of the linguistic signified as iconic conceptualisation.

It was Merleau-Ponty who shifted phenomenology towards granting 'primacy' to perception, and so to claim the role of father of the 'corporeal turn.' Though attention to perceptual being in the world as well as the *Vorstellungswelt* had been a legitimate domain within Husserl's frame of inquiry, Husserl's own heady focus retarded attention to the body. And although Roman Ingarden's work on the constitution of complex objects, such as the literary work, did draw attention to the role of *Vorstellung*, it was Merleau-Ponty who forcefully filled this gap by redirecting phenomenology in a way that has been much more influential on current thinking than tends to be acknowledged. In the final analysis, however, Merleau-Ponty (1964: 25) failed his own program by falling back on the concession of a 'nascent logos' underlying everything, a leap of faith that defies philosophical, though not semiotic, explanation. All we can do is to speculate that it was his Catholicism that made him qualify his audacious stance. How else could he convince himself to write that there is, after all, 'an *essence* beneath us, a common nervure of the signifying and the signified'? (Merleau-Ponty 1968: 118)

From a semiotic perspective, the shift towards perception was a timely reminder that the 'linguistic turn' had outlived its usefulness, certainly in its strong version. In its modest form, the linguistic turn rightly pointed to the fact that our means of representation are not fully transparent or neutral with respect to what we are representing. In particular, all linguistic representation carries with it the effects of the way we formulate our philosophical problems. Nor is it possible to eliminate the filter of language from our descriptions. In its strong version, however, the linguistic turn has been fatal for the discussion of iconicity in representation and *Vorstellung*. Not only did the linguistic turn, as Richard Rorty has observed, replace talk of experience and representation by talk of the medium itself, language (Rorty 1992: 373), the linguistic turn has also made it impossible

to think human semiosis other than in reduced linguistic terms. The linguistic turn, I suggest, has gone berserk. To say that we can experience only what we can express in language is a serious shrinking of our semiotic activities to symbolicity. This is particularly prejudicial if we hold a view of language that is essentially syntactic, or even reduced to the differential relations of 'mere,' 'floating,' or more recently 'flickering' signifiers (Hayles 1993: 76). It is noteworthy that Jacques Derrida has clearly distanced his work from this kind of reductionism: 'we cannot do without the concept of the sign' in its 'radical difference between the signifier and the signified' (Derrida 1978: 281). That the elimination of the signified should nevertheless be so popular in a discipline such as Cultural Studies is ironic since it moves our conception of language close to formal signification and so forecloses the very subject matters at the heart of 'culture,' cultural difference, interculturality and questions of power. It would seem then that the 'corporeal turn' is a significant and timely intervention. But to be successful, it needs to go well beyond Merleau-Ponty's opening gesture. And so it has in a number of approaches.

4.1. *Neurolinguistics: Embodied concepts and embodied realism*

One such approach has recently been well publicized from the camp of neurolinguistics. In their book *Philosophy in the Flesh: The Embodied Mind — A Challenge to Western Thought*, Lakoff and Johnson (1999) have contributed a forceful argument in favor of restoring corporeality to the study of language and the human imagination. They do so from neurological premises, with key notions such as 'embodied concepts' and 'embodied realism.' Accordingly, 'an embodied concept is a neural structure that is actually part of, or makes use of, the sensorimotor system of our brains. Much of conceptual inference is, therefore, sensorimotor inference' (Lakoff and Johnson 1999: 20). From this they argue that 'if concepts are ... embodied in the strong sense, the philosophical consequences are enormous. The locus of reason (conceptual inference) would be the same as the locus of perception and motor control, which are bodily functions' (Lakoff and Johnson 1999: 20). Furthermore, 'the very properties of concepts are created as a result of the way the brain and body are structured and the way they function in interpersonal relations and in the physical world.' (Lakoff and Johnson 1999: 20). One consequence of this position is that 'the embodied-mind hypothesis therefore radically undercuts the *perception/conception* distinction. In an embodied mind, it is conceivable that the same neural system engaged in *perception* (or in bodily *movement*) plays a central role in *conception*

(Lakoff and Johnson 1999: 38). For Lakoff and Johnson, 'it is eminently plausible that reason has grown out of the sensory and motor systems and that it still uses those systems or structures developed from them. This explains why we have the kinds of concepts we have and why our concepts have the properties they have' (Lakoff and Johnson 1999: 38). The metaphysical consequences of this picture are described by the authors as a movement from the stipulation of an 'embodied mind' that 'thus leads us to a philosophy of embodied realism' (Lakoff and Johnson 1999: 44).

The Lakoff and Johnson position is persuasive in that it offers an argument for the bridging of the gap between language and perception, a move desperately needed to balance existing linguistic theorisation. Iconicity, although not part of their vocabulary, can now re-enter the debate about the linguistic sign via the neurological notion of 'mapping' which we share in principle with other organisms. Leaving aside the anti-Western philosophy hype of *Philosophy in the Flesh*, the book's main flaw is its inability to give a satisfactory account of the social. Ironically, this blind spot seems to be a result of precisely the kind of empirical science orientation of which the book is so proud. Without any speculative theory of language, the empirical evidence of neural science proves too blunt an instrument with which to explain what happens when we communicate linguistically. In spite of all of Lakoff's previous work, one wonders what kind of theory of language they are advocating. Lakoff and Johnson, I think, need to show how exactly the sound sequences of linguistic expressions are typically 'filled' with perceptual and sensorimotor content. Before we can understand the terms 'embodied meaning' or 'embodied language,' we need to address the relationship between perceptual grasp, such as tactile, aural, olfactory, or visual patterning and the way such 'readings' *in-form* words and phrases. Since there is no empirical evidence of how we get from neural pathways of a perceptual and sensorimotor type to the manner in which we activate linguistic sound sequences, we need a speculative theory to link the two. Unfortunately, Lakoff and Johnson despise speculative theorizing and so deprive themselves, and us, of several important steps towards a picture of how language works (Ruthrof 2004).

What are these speculative steps? First, we need an account of how language *means*. This, according to their own premises, requires an alternative to the definitional approach (meanings are in dictionaries) and the syntactic solution (meaning emerges from differential syntactic relations); second, we must give an explanation of the way perceptual structures are meaningful in themselves, such that they become compatible with linguistic expressions. One fruitful way to do this is via a general semiotics (in

the Peircean, but not in the Saussurean, tradition) in which non-verbal signs can be related to linguistic formation to constitute the linguistic sign. Third, we should avoid the charge of mentalism and subjectivity theorizing how culture functions in the processes of language acquisition and the monitoring of language use; and fourth, we must grapple with the metaphysics underlying such a theory, a layer usually concealed in linguistics.

As it stands, *Philosophy in the Flesh* offers too ontic a notion of coherence, and if viewed as a heuristic, the book works with too narrow an interpretive frame. By contrast, a speculative corporeal pragmatics accepts the embodied mind hypothesis as a *primitivum*, while reaching well beyond neurological insights. Perhaps these limitations could have been avoided if they had acknowledged compatible positions in speculative philosophy and in particular the groundbreaking work of Charles Sanders Peirce.

4.2. *Semiotics from Peirce to Kristeva*

Crucial to my argument in this paper is Peirce's insistence on the primacy of iconicity. According to Peirce, humans are unable to interpret their world without transforming their signs into 'iconic' signs, that is, signs that in some way stand in a representational relation to their objects. 'Every assertion must contain an icon or a set of icons, or else must contain signs where meaning is only explicable by icons' (CP 1.158). In short, human interpretants are typically and ultimately iconic. This does not preclude our ability to construe pure symbolicity in formal logic. What Peirce insists on is that to make symbolicity *imaginable* requires a translation into iconic signs. Let me try out two illustrations:

Example 1: speed, acceleration, accelerated acceleration, etc., expressed in symbolic terms.

Velocity: $v = s : t$

Acceleration: $a = s : t \times t = s : t^2$

Accelerated Acceleration: $aa = s : t \times t \times t = s : t^3$

Acceleration of aa: $aaa = s : t^4$

The mathematical formulations carry on, but we soon begin to fail to be able to imagine the kinds of human situations they are meant to represent.

Example 2: Heisenberg's description of the 'cut' in the 'uncertainty principle.'

In a paper published 70 years ago, Heisenberg specifically restricts the famous fuzziness in the description of subatomic events to an incommensurable ‘cut’ [*Schnitt*] between the discourse of classical physics on the observer side and the formal language that describes the object relations in the atom, two semiotic systems for which Jakobson’s ‘intersemiotic translation’ would prove problematic. Heisenberg points to a ‘strange contradiction’ [*Zwiespalt*] in the description of what occurs. ‘On the one hand, the experimental questions which we ask nature are always formulated with the help of the *imaginable concepts of classical physics*, using especially the concepts of space and time of perception ... On the other hand, the mathematical constructs suited to the representation of experimental states of affairs are wave functions in multidimensional spaces of configuration that do not permit simple, imaginable interpretation.’ (Heisenberg 1987 [1934]: 438–501, my translation, emphasis added). As a result of this contradiction, Heisenberg speaks of ‘the necessity to make a cut in the description of atomic events between the measuring instruments of the observer, which are described by way of classical concepts, and the object of observation, the behaviour of which is represented by a wave function.’ Heisenberg is adamant that ‘on both sides of the cut, one the side of the observer, as well as on the side of the object of observation *all relations are sharply determined* — here by the laws of classical physics, there by the differential calculus of quantum mechanics’ (Heisenberg 1987 [1934]: 438–501, my translation, emphasis added). This incommensurability of two sign systems results in a ‘barrier for the applicability of classical concepts’ that limits the ‘degree of precision’ of classical descriptions in the subatomic domain. Yet it is this very ‘limitation of precision’ that allows us to connect ‘particle and wave pictures,’ a linkage not permissible in the formulations of quantum mechanics. For ‘nowhere does quantum mechanics leave room for a supplementation of its propositions’ (Heisenberg 1987 [1934]: 438–501, my translation). The only area where indeterminacy applies is the *cut*. Given this situation, Heisenberg suggests that we will probably have to abandon the idea of ever again being able to reconcile these descriptions under ‘an objective time scale shared by all observers’ (Heisenberg 1987 [1934]: 438–501, my translation; Ruthrof 2004).

For our discussion here this means that the ‘imaginable concepts of classical physics’ that Heisenberg identifies, an *iconic* sign system, cannot be translated into non-imaginable functions without serious distortion. The human scale semiosis, which informs classical physics, is what we need to be able to relate to symbolic representations at scales beyond the human perceptual range of conception, beyond Peirce’s iconicity. In Heisenberg’s domain of quantum mechanics only symbolicity can account

adequately for the available experimental evidence. This then is another the limiting case where Peirce's insistence on the translation between different sign systems fails. At the same time, the Heisenberg example forces us to accept that human perceptual, corporeal, or iconic grasp is an inappropriate tool for the description of certain scientific domains.

The semiotician in the Saussurean tradition who has best been able to embrace corporeality as a crucial ingredient of our linguistic acts is Julia Kristeva. I find it striking that she does not do so in her linguistic work, which remains faithful to the post-Saussurean syntactic emphasis. It is in her psychoanalytic writing, especially in a slim volume, *In the Beginning Was Love: Psychoanalysis and Faith* (1987) that Kristeva offers a perspective on the role which our somatic and other corporeal processes play in language. Here she develops a 'powerful model of the human in which *language is not divorced from the body*; "word" and "flesh" can meet at any moment, for better or for worse' (Kristeva 1987: 6). Thus has Kristeva opened the door also for the structuralist tradition to review Saussure's remarks on the signified as 'concept' or 'image'. *Vorstellung* has re-entered the semantic arena.

Other feminist writers, such as Irigaray (1985) or Cixous (1997), have celebrated nonverbal signification, especially the tactile, as a political program without however proceeding to a cogent theorisation of how to return corporeality to language as a matter of *necessity* (Ruthrof 2000: 109–115). Nor is the path towards such an argument available to us as proposed by Pamela Banting in 'The Body as Pictogram: Rethinking Helene Cixous's *écriture féminine*' (1992). She sees Jakobson's 'intersemiotic translation' as theoretical platform for Cixous's demands. But this seems to be barred by the specifics of Jakobson's formulations. Jakobson's intersemiotic translation is a 'can rule,' not a 'must rule.' Accordingly, we are able to translate a sculpture into a written text, just as we are able to illuminate a written text by a filmic transformation. Crucially however, we do not have to do so. Each of Jakobson's semiotic systems, the verbal, the visual, the tactile, the auditory, are autonomous semantic domains: they mean by themselves. If this is so, then the addition of corporeality in its tactile or sonoric forms is no more than a commendable option that can enrich our signifieds, but not a *necessary* semantic linguistic ingredient.

4.3. *Corporeal pragmatics*

This is why in my own work on corporeal semantics/pragmatics I have insisted that language is *meaningless* unless and until its signifiers are

activated by nonverbal signification. In this picture, language is no more than a syntactically ordered matrix of semantically empty signifiers waiting to be turned into full linguistic signs by nonverbal signification. At the level of the signified we are iconic beings. I suggest that nonverbal human signification as it occurs in perception and acts of fantasy, in short in our *Vorstellungswelt*, constitutes the deep structure of natural language. The position of corporeal pragmatics can be summarily formulated in four broad stages:

1. Redefinition of the linguistic sign (activation of signifiers by non-verbal signs);
2. The role of culture (pedagogy of selection of appropriate nonverbal signs);
3. Control mechanisms ('sufficient semiosis' replacing truth-conditions);
4. Metaphysical frame (role of deep or 'noumenal' constraints filtered by culture).

The nonverbal here is the indispensable semantic component that allows us to turn signifiers into signifieds and so into full linguistic signs. Nonverbal semiosis both in its iconic read-only version as it appears in perception (ROSS), together with its communicative variety (COSS), provides the reservoir on which we draw when we interact meaningfully in language. Interculturality, I suggest, powerfully supports such a theoretical scenario.

5. Conclusion: The centrality of *Vorstellung*

We may be machinic in continuously different forms, stone tool users, beings of mechanics, industrial creatures, or digital beings. In all these human machinic formations, culturally organized *Vorstellungen* are central to how we function. The Fregean tradition violently disagrees. As Quine, for example, tells us in *Pursuit of Truth*, 'In psychology one may or may not be a behaviourist, but in linguistics one has no choice ... There is nothing in linguistic meaning beyond what is to be gleaned from overt behaviour in observable circumstances' (Quine 1993: 37f.). No surprise here, given the restricted definition of meaning that informs analytical philosophy up to Davidson (Davidson 1979). A few pages later, however, Quine runs into an entirely predictable contradiction. He has to concede that 'empathy dominates the learning of language, both by the child and the field linguist ... We all have an uncanny knack for empathizing another's perceptual situation ...' (Quine 1993: 42). And four pages down we find that 'practical psychology is what sustains our radical translator

all along the way, and the method of his psychology is empathy: he *imagines* himself in the native's situation as best he can' (Quine 1993: 46).

Let me return to Wittgenstein's *Philosophical Investigations* for a moment to demonstrate a similar tension. While he is committed to looking at language in its publicly demonstrable 'use,' he again and again employs phrases such as 'imagine a situation in which ...' (polysemiotic and heterosemiotic) rather than 'take a sentence such as ...' (monosemiotic and homosemiotic). Even in order to shrink his students' attention to the narrow focus on what features of the language game meet the eye and ear, he needs to invoke the larger intersemiotic frame of an imagined social situation. 'Let us imagine a language ...' (PI: 2); 'Imagine a script ...' (PI: 3); 'We could imagine that ...' (PI: 6); 'Imagine someone saying ...' (PI: 14); 'It is easy to imagine a language consisting ...' (PI: 19); 'Imagine a language game in which ...' (PI: 21); 'We could imagine a language in which ...' (PI: 21); 'Imagine a picture representing a boxer ...' (PI: 23n); 'One can also imagine someone's having learnt ...' (PI: 31); 'Can we not now imagine further rules ...' (PI: 86); in Wittgenstein's German, the verbs he employs vary from *vorstellen* to *denken* and other phrases of conjecture. Likewise, we find many phrases such as the parenthetical, that is, begrudgingly conceded '(Das Aussprechen eines Wortes ist gleichsam ein Anschlagen einer Taste auf dem Vorstellungsklavier)' [(Uttering a word is like striking a note on the keyboard of the imagination)] (author's translation, PI: 6), on an 'imaginary piano,' another cluster of iconic signs. If the medium is the message, then Wittgenstein's illustrations speak more loudly than his propositions.

In practice, intercultural negotiation, in itself not a linguistic but an intersemiotic activity, is sustained by the productive play of *Vorstellung*, the behaviourist's, the logician's, and the syntactician's nightmare. Given digital advances, we can predict with some confidence that *Vorstellung* will soon be displayed, measured and triumphantly incorporated in Quine's schema by his successors. Quine regards understanding as 'a statistical effect' which 'resides in multiplicities' (Quine 1993: 59). For Quine, 'the nucleus is the word, and the mass is made up by the countless sentences in which the word occurs' (Quine 1993: 59). This is the clever but sadly limited result of a suffocating frame of inquiry. What actually occurs is that in mutual understanding, we have successfully negotiated the way in which we activate the empty linguistic schemata of words in discourse with appropriate *Vorstellungen*, that is, culturally guided, internalised clusters of iconic signs, and not just of the visual variety.

While *Vorstellung* is an embarrassment to post-Saussurean linguists and post-Fregean philosophers alike, in intercultural negotiation it is ubiquitous. It appears in

- perception as the *Vorstellung* of the actual (what we actually taste, smell, touch)
- representation (realist) as the *Vorstellung* of the absent
- memory as the *Vorstellung* of the past (e.g., a painful emotion)
- prediction as the *Vorstellung* of the future
- suggestion as the *Vorstellung* of the tentative
- certitude as the *Vorstellung* of what seems compelling
- hope as the *Vorstellung* of what we wish will be the case
- fantasy as the *Vorstellung* of the possible and impossible
- dream as the *Vorstellung* of the unconscious
- hallucination as the *Vorstellung* of the counter-factual
- utopia as the *Vorstellung* of a desirable world
- dystopia as the *Vorstellung* of a catastrophic world

With the prominence of language, perceptual being appears to have largely gone ‘underground’ as *Vorstellung*, from where it transforms the signifiers of all natural languages into iconic signifieds, concrete and abstract. Human epistemology arises out of the body, the result of auto-poietic evolution. It is this shared corporeality which, in spite of cultural difference, makes translation and interculturality possible.

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Horst Ruthrof (b. 1939) is Professor Emeritus in English and Philosophy at Murdoch University <ruthrof@murdoch.edu.au>. His research interests include philosophy of language, phenomenology, semiotics, narrative, Kant, and poststructuralism. His recent publications include *Pandora and Occam: On the Limits of Language and Literature* (1992); *Semantics and the Body: Meaning from Frege to the Postmodern* (1997); *The Body in Language* (2000); and 'The fourth critique' (2004).

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